

**DIFFERENCE NUMBER OF SCHIZONT AND HISTOPATHOLOGICAL  
APPEARANCE OF CHICKEN CEACUM DUE INFECTED BY  
LABORATORY STRAIN *Eimeria tenella* WITH WILD  
STRAIN *Eimeria tenella* AT LOW DOSE**

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**ABSTRACT**

The aim of this research was to know the difference of number of schizont and histopathological appearance of chicken ceacum infected by laboratory strain *E. tenella* with wild strain *E. tenella* at low dose. This research used histopathological scores that included ceacum epithel erosion, inflammatory cell infiltration, sub-mucosal edema and the number of schizont. There are 30 broiler chickens that are divided into 6 treatment groups. Groups P1, P2 and P3 were infected with laboratory strain of *E. tenella*, then P4, P5 and P6 groups were infected with wild strain *E. tenella*. The feces samples was processed by floating method. Histopathological scores and number of schizonts were examined under microscope with magnification 400-1000x. The results showed that there was significantly difference ( $p < 0.05$ ) in the histopathological score between the infected group laboratory strains of *E. tenella* with wild strains of *E. tenella*. The number of schizont showed significantly difference ( $p < 0.05$ ) between the infected group laboratory strains of *E. tenella* with wild strains of *E. tenella*. The number of schizonts P4, P5, and P6 was highest than P1, P2, and P3. Histopathological scores of P1, P2, and P3 was lower than P4, P5, and P6. The conclusion of this research pathogenicity of wild strains of *E. tenella* was higher than that laboratory strain of *E. tenella* shown from injury levels of histopathological chicken ceacum and number of schizont.

**Keywords:** *Laboratory strain Eimeria tenella*, *wild strain Eimeria tenella*, ceacum epithel erosion, inflammatory cells, oedema, number of schizont